

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A gray scale column driver circuit for an alternating current dielectric electroluminescent display comprising rows, columns that intersect the rows and pixels at the intersections of said rows and columns, said column driver circuit comprising:

a counter receiving video signal gray level data and in response counting for a time interval proportional to said gray level data;

a non linear analogue voltage ramp generator connected to said counter, said non linear analogue voltage ramp generator outputting a ramping voltage during said time interval, wherein said ramping voltage conforms to a curve having an initial convex portion followed by a concave portion, wherein said initial convex portion conforms to a negative second derivative with respect to said time interval, and wherein said concave portion conforms to a positive second derivative with respect to said time interval; and

a column driver receiving the ramping voltage and in response applying ~~alternating polarity~~ driving pulses to the columns of said dielectric electroluminescent display, wherein said ramping voltage determines a maximum voltage of the alternating polarity driving pulses applied to the columns of said dielectric electroluminescent display.

2. Cancelled

3. (Previously Presented) The gray scale column driver circuit of claim 1, wherein said counter is an 8-bit counter for delineating said time interval to define 256 gray levels.

4. Cancelled

5. (Previously Presented) The gray scale column driver circuit of claim 17, wherein said non linear analogue voltage ramp generator further comprises an integrator circuit and at least two current sources generating and applying currents to said integrator circuit such that when a first one of said current sources is connected to said integrator circuit said convex portion of said ramping voltage is generated, when said at least two current sources are connected in parallel to said integrator circuit a transition portion of said ramping voltage between said convex portion and said concave portion is generated, and when a second one of said current sources is connected to said integrator circuit said concave portion of said ramping voltage is generated.
6. (Previously Presented) The gray scale column driver circuit of claim 5, wherein said first one of said current sources generates a current that decreases during said time interval, and said second one of said current sources generates a current that increases during said time interval.
7. (Previously Presented) The gray scale column driver circuit of claim 5, wherein said at least two current sources are time-dependent voltage feedback controlled current sources.
8. (Withdrawn – Previously Presented) The gray scale column driver circuit of claim 5, wherein said at least two current sources are constant current sources.
9. (Previously Presented) The gray scale column driver circuit of claim 5, wherein said non linear analogue voltage ramp generator further comprises a threshold control circuit for controlled switching of said at least two current sources.
10. (Previously Presented) The gray scale column driver circuit of claim 5, wherein said non linear analogue voltage ramp generator further comprises a frame polarity

control circuit selecting between said first ramping voltage for said positive row voltage and said second ramping voltage for said negative row voltage.

11. Cancelled

12. (Previously Presented) The gray scale column driver circuit of claim 9, wherein said threshold control circuit further includes a control input setting a transition voltage between said convex and concave portions of said ramping voltage.

13. Cancelled

14. Cancelled

15. Cancelled

16. Cancelled

17. (Previously Presented) The gray scale column driver circuit of claim 1 wherein said voltage ramp generator generates a first ramping voltage when a positive voltage is applied to a row of said electroluminescent display and generates a second ramping voltage when a negative voltage is applied to a row of said electroluminescent display.